



MEETING SUMMARY

US 97 BAKER ROAD INTERCHANGE AREA MANAGEMENT PLAN (IAMP)

TECHNICAL ADVISORY COMMITTEE (TAC) AND COMMUNITY ADVISORY COMMITTEE (CAC) MEETING #4

JANUARY 10, 2022; 10:30 AM – 12:00 PM

VIRTUAL

ATTENDEES

Technical Advisory Committee Members

Andrea Napoli (Bend MPO)

David Hirsch (ODOT)

David Warrick (ODOT)

Dejan Duditch (ODOT)

Jim Scholtes (ODOT)

Peter Russell (Deschutes County)

Rachel Zakem (Cascades East Transit)

Chris Cheng (ODOT)

Bob Stolle (ODOT)

Aaron Myton (ODOT)

David Abbas (City of Bend)

Damian Syrnyk (City of Bend)

David Knitowski (ODOT)

David Amiton (ODOT)

Jenn Cline (ODOT)

Theresa Conley (ODOT)

Community Advisory Committee Members

Henry Stroud (Bend Park & Recreation District)

Greg Bryant (Deschutes River Woods)

Ben Miller (Morning Star Christian School)

Brooke Eldridge (Abilitree)

Bill Gregoricus (Central Oregon Coalition for Access)

Project Team

Don Morehouse (ODOT), John Bosket (DKS Associates), Kayla Fleskes (DKS Associates), Andrew Johnson (HDR)

Other Public Attendees

Brian Potwin (Commute Options)

INTRODUCTIONS/ AGENDA OVERVIEW/ PROJECT STATUS

- John Bosket opened the meeting and gave a brief overview of the project status. The last TAC and CAC meetings were in October. Since then, the project team received input from the community through an online open house and virtual public meeting, as well as additional comments from ODOT management.
- John noted the purpose of the meeting is to agree on a recommendation for a preferred alternative. There could be conditions or modifications for each of these alternatives. The preferred alternative will go to the Bend MPO Policy Board for confirmation.
- Following the selection of the preferred alternative there will be refinement of the preferred alternative, development of an access management plan, code and policy amendments needed for adoption and implementation, and review of the draft Interchange Area Management Plan.

BRIEF REVIEW OF ALTERNATIVES

- John provided a brief overview of the three alternatives including the active transportation framework and the alternatives for Baker Road/Cinder Butte Road. He noted there is room for refinement, but these elements are largely consistent with and independent of the broader interchange alternatives.
 - The main change between alternatives is how southbound US 97 access is accommodated at the interchange (the west side of the interchange).
 - Cost estimates provided for each alternative represent the order of magnitude differences well, but there may be costs unaccounted for at this level of preliminary concept design.
- John reminded the committees that while roundabouts for the interchange ramp terminals has been the preference by many stakeholders, any roundabouts on the state highway system would be subject to the stakeholder engagement process for approval outlined in ODOT Highway Directive DES 02. If during the stakeholder engagement process it is determined roundabouts would be infeasible at the US 97 ramp terminals, traffic signals would be necessary instead.
- Recommended improvements on Baker Road at Cinder Butte Road are generally the same for all alternatives. Cinder Butte would be realigned 25-50 feet to the west, left turn lanes would be constructed on Baker Road, and northbound right turn lane would be constructed on Cinder Butte Road. Alternative 3 also includes a traffic signal, but that is an optional improvement that was mostly included to provide a controlled pedestrian crossing on the west side of US 97.
- Alternative 1: Enhance Existing Ramp Terminals
 - The focus of this alternative is attempting to maintain much of the existing interchange.
 - The southbound ramp terminal intersection moves closer to the railroad but a traffic signal provides more flexibility for clearing queues away from the railroad.
 - The southbound ramp terminal is aligned with Baker Court to eliminate the turning conflicts that exist today.
 - High-level cost estimate is \$14.1 million (the least costly alternative).
- Alternative 2: Tight Urban Diamond Interchange (TUDI)

- A more traditional diamond-shaped interchange with roundabouts at each ramp terminal intersection on Baker Road. The southbound ramps are moved further east to create more separation with Baker Court and the railroad.
- This alternative restricts left turns out at Baker Court, which instead make a U-turn at the nearest roundabout.
- High-level cost estimate is \$18.3 million.
- Alternative 3: Southbound On- and off-ramp Flyovers with Roundabout
 - The west side of the interchange is moved to the east side to create a single intersection for the interchange. The requires large fly-over ramps/structures to cross over the highway for southbound US 97 movements.
 - Access to Baker Court is relatively unchanged, although a left turn lane is added along Baker Road.
 - This alternative is likely more difficult to phase and construct, with a higher cost risk.
 - High-level cost estimate is \$34.5 million (the most costly alternative).
- Ben Miller had a few questions:
 - He noted that Morning Star owns property (along with other property owners) on the north side of Baker Court and noted the space is currently landlocked. He asked if access could be provided to the land.
 - He noted several hundred people come into Baker Court to drop off students and turning left from Baker Court onto Baker Road can be challenging. Therefore, he likes that Alternative 1 and 2 address the northbound left turn out. He does not like Alternative 3, particularly given the cost, as the left turn access is effectively unchanged at Baker Court. He noted concerns with accelerating to turn right onto Baker Road and travel up the bridge during the winter when snowy/icy conditions are present. He feels like a traffic signal in Alternative 1 would provide more time for vehicles to gradually accelerate.
 - He appreciates trail system connections throughout the interchange area.
 - > In response to Ben’s questions, John noted that under any alternative, access north of Baker Court is going to be quite a challenge. Alternative 1 may take some of those properties. Alternative 3 has more opportunity to access properties to the north side, but may also require ramp construction over the northern most properties.
 - > Ben Miller asked if there is an opportunity to include plans to cover the canal. Greg Bryant noted it is not included specifically in the US 97 Baker Road IAMP, but Henry noted that Arnold Irrigation district operates the canal and they have plans to pipe it, tentatively in the four to six year timeframe.
- Brian Potwin noted concerns about the Baker Court intersection and the proximity to the railroad. Alternative 2 includes a roundabout and anecdotally, the Reed Market Road/15th Street roundabout turns into complete chaos when a train blocks the street. A signalized intersection would be more prudent given the proximity to railroad. From a pedestrian and bicycle safety perspective, he also likes Alternative 1.
- Brian asked if the multi-use path side on the south side is a separate bridge? Andrew Johnson noted that it could be a standalone bridge or a bridge could be constructed to the north of the

existing structure but regardless, the intent would be to make sure the facilities for people walking and biking felt separate from motor vehicle traffic. Brian appreciated the energy provided into active transportation connections with the alternatives.

- Ben asked in Alternative 2 if the access to the school/gas station could be provided on the on-ramp to pull traffic away from the railroad. Ben noted there is open property between the school and the store.
 - John noted this likely wouldn't address the main concern with the roundabout near the railroad, which is the heavy southbound right turn movement from the off-ramp heading towards Deschutes River Woods. There would still be the potential to backup towards the roundabout during rail crossing events.

FEEDBACK RECEIVED

- John noted that based on the comments received in the open house and virtual public meeting in general, roundabouts are preferred over traffic signals. Accommodating evacuation needs are essential. There is a desire to get improvements soon and recognition that cost will impact that. Concerns were noted about serving more traffic to the new high school or more traffic than anticipated from new development to the east.
- There were some discussions during the prior TAC meeting about a protected or raised bike lane on the north side of Baker Road, which can be refined moving forward.
- Based on the prior CAC meeting, a closure or turn restrictions at Cinder Butte Road are not supported.
- Concerns about addressing the difficulty of accessing Baker Court were expressed.
- There was interest from the community in how improvements could be phased.
- Alternative-specific feedback the project team heard included:
 - Alternative 1 brings the ramp terminal close to the railroad but also resolves access conflicts
 - Alternative 2 has a less desirable at-grade crossing with the multi-use path on the south side
 - Alternative 2 does not fully address access conflicts on the west side
 - Alternative 3 cost is high, and the complex construction risks may increase the cost further
 - Alternative 3 may be more difficult to build in phases
- Alternative 2 seemed preferred according to comments received through the online open house survey. That could be based primarily on the fact that Alternative 1 has a traffic signal because roundabouts were strongly expressed as a preferred treatment.

DISCUSS A RECOMMENDATION

- John noted some of the differentiators for the alternatives included:
 - Alternative 3 performs well but costs significantly more and that cost could be a barrier to getting relief soon. It could be maintained as a potential longer-term solution.

- Alternative 1 does a better job than Alternative 2 at resolving access conflicts and improving Baker Court and may be more efficient for transit.
- Alternative 2 has only the crossing of the proposed low-stress multi-use path on the south side of Baker Road.
- Alternative 3 creates better opportunities for access to properties in the northwest quadrant, north of Baker Court.
- Alternative 1 rates lower for evacuation support – though it is not fatally flawed.
- Alternative 2 would be more impacted by railroad crossings than other alternatives.
- Given the popularity of roundabouts, it is recommended that alternatives use roundabouts unless it is found to be not feasible per freight discussion (except for the southbound ramp in Alternative 1).
- Peter Russell noted that the Deschutes County Road Department has identified Cinder Butte Road/Baker Road for signalization in the 2020-2040 Transportation System Plan (TSP).
- Andrew noted a couple of frameworks that the TAC could consider for their recommendation:
 - Recommend a smaller fix (Alternatives 1 or 2) in short-term and bigger fix (Alternative 3) in the long-term.
 - > John noted that Alternatives 1 and 2 are forecast to operate very well 20 years from now. If they are referred to as “short-term” improvements, it should be acknowledged that they should work well beyond the 20-year planning horizon.
 - The project team could develop certain triggers (if traffic volumes get to certain levels) for looking at other alternatives or implementing future phases.
 - Recommend one of the three alternatives and recognize that some time in the future phases/improvements could be reopened if needed.
- Ben Miller prefers Alternative 1 to address short-term needs. His concern with Alternative 3 is that it does not fix left turns out of Baker Court. Alternative 3 also only has one roundabout rather than two and costs the most. His preference (in order) would be Alternative 1, 2 then 3. He does not feel Alternative 3 should be identified as a long-term phase to Alternative 1.
- Damian Syrnyk asked the project team if there are enough commonalities with Alternatives 1 and 3 that they could be phases of one another?
 - Andrew Johnson noted that on the east side, you could set the roundabout in a location that could accommodate Alternative 3 at a future date. Therefore, you would not necessarily need to pay the full cost of both alternatives if they were a phased option of one another.
- Dave Warrick noted you will likely not be able to access properties north of Baker Court with Alternatives 1 and 2.
- Theresa asked to view the alternative scoring by evaluation criteria from Technical Memorandum #5 to get a sense of the big picture. John noted that all the alternatives are expected to be viable solutions and perform well against the goals of the project. Alternative 3 performs the best but is going to be the most challenging to fund and implement. Alternatives 1 and 2 are close but there are some minor differences, in particular the multi-use path crossing of the

southbound ramp in Alternative 2 and that Alternative 1 would contain a traffic signal on the southbound ramp.

- Chris Cheng noted that his preference is for Alternative 1. He doesn't think Alternative 3 adds enough value to justify its double cost and is fine with either considering Alternative 3 as a future enhancement beyond Alternative 1 or eliminating it. He is not a fan of Alternative 2 due to the at-grade highway on-ramp crossing which may negate an otherwise all-ages-and-abilities bike/ped facility.
- Ben Miller asked if there is an opportunity to add a traffic signal at Baker Court in Alternative 3, particularly if access is provided to the properties north of Baker Court.
 - Dave Warrick noted that a signal could provide access to properties but is not sure if a traffic signal is warranted. Alternative 3 provides the most opportunity to clean up access.
 - Ben Miller would prefer Alternative 3 if a traffic signal could be added to Baker Court. John noted it could be a while before a traffic signal is warranted at the intersection. A signal at Cinder Butte as identified in the Deschutes County TSP would also make a signal at Baker Court more challenging, given the close intersection spacing.
- David Knitowski asked why a roundabout is preferred at the northbound ramp terminal in Alternative 1, from a consistency perspective? Most US 97 ramps are signalized or two-way stop-controlled today. Would there be an option to do a traffic signal at the northbound ramp?
 - John noted that yes, a traffic signal could be included and is shown as an option. John noted that there is significant community interest in roundabouts over traffic signals and traffic signals generally require more travel lanes be constructed over the US 97 overcrossing but either traffic signals or roundabouts could work. In Alternative 1, given the proximity of the southbound ramp to the railroad, it only works well as a traffic signal.
 - David Hirsh noted that any roundabout or traffic signal must be approved by the State Traffic/Roadway Engineer but both are always analyzed. Closely spaced traffic signals are generally going to be more challenging.
 - David Knitowski noted that Revere Avenue is relatively similar with the proximity to the railroad. He asked at what point in the process will the decision for a traffic signal or roundabout be made? Andrew noted we would not wait until that decision is made before selecting a preferred intersection control. Any alternative could accommodate traffic signals or roundabouts. Any proposed roundabouts will need to go to the Mobility Advisory Committee (MAC) for review. John noted the MAC will review proposed roundabouts during the IAMP process and during design.
- David Amiton asked Peter Russell - Since we're talking a fair amount about access for those landlocked parcels, has the County looked at this/planned for this? Either providing access to Baker Road or some other ingress/egress?
 - Peter Russell vaguely remembers from his time at ODOT/ first days at County that there was a land use application in that area and either there was no legal access or ODOT has purchased access control.
 - > This is something that will require further research.
 - Ben Miller provided links to DIAL for the Morning Star properties north of Baker Court:

- > <https://dial.deschutes.org/Real/Index/110048>
- > <https://dial.deschutes.org/Real/Index/110047>
- > <https://dial.deschutes.org/Real/Index/110049>
- David Amiton noted that Alternative 3 has impacts to tax lots north of Baker Court with the flyovers, particularly north of the canal.
- David Amiton asked with respect to Alternative 3, it would be helpful to see the taxlot overlay with the ramp configuration, but it's not clear to that it would actually help the access situation. He thinks the southbound flyover ramp (as sketched) flares so far to the west that there is heavy encroachment into those taxlots.
- Peter Russell's preference (in order) is Alternative 3, Alternative 1 and Alternative 2 since it cleans up access. Right now, there is a lot of federal transportation money and Alternative 3 could be a more economical choice to make in the long run.
- Andrea Napoli noted that knowing competing interests for funding along US 97, she does not think that much funding could go towards this interchange.
- Damian noted that Alternative 3 has been called the best long-term solution but he wants to understand what could be done in the near-term if Alternative 3 is preferred long-term.
- Henry noted that his preference is Alternative 1 as short-term, potentially Alternative 3 as long-term solution. The roundabout design for Alternative 3 is large and confusing and he would want particular attention paid to the design of the roundabout for pedestrians, bicyclists and motor vehicles. His specific concern would be a westbound vehicle wanting to travel southbound.
- Greg Bryant noted it would take a while to go from Alternative 1 to Alternative 3. Andrew Johnson noted it would likely be 4-6 years before funding comes in and asked David Amiton to provide additional context.
 - David Amiton noted the next ODOT Statewide Transportation Improvements Program cycle would be 2027-2030. Potential funding sources could be ODOT Operations or Enhance program, but neither is very large (for example, 2024-2027 cycle allocates \$65 million for the entire state). Almost any of the alternatives would require phasing and the best-case scenario would be design for first phase in 2027-2030 cycle. There are some variables (such as the infrastructure bill) that could increase funding, but it would take a while to fund.
- David Amiton noted that he leans toward Alternatives 1 or 3. He thinks Alternative 1 provides a better set of solutions for local access than Alternative 2 (less weaving, signalized access, eliminates the offset, easier to maintain). Between Alternatives 1 and 3, he prefers Alternative 1 for cost reasons (\$14 million versus \$35 million), which is directly tied to how likely and how quickly they are likely to be implemented. For either Alternative 1 or Alternative 3, he would focus on phasing by west/east side.
- Ben Miller noted he hopes for access to landlocked property and a signalized left/right turn out of Baker Court.
- Preliminary ranking by the committee showed preference (in order) for Alternative 3, Alternative 1 and Alternative 2. Ranking by the end of the meeting shifted so Alternative 1 and Alternative 3 were tied in preference.

- Andrew Johnson noted the plan would likely include some aspect of Alternative 1 and Alternative 3 as a potential long-term phase. Alternative 1 could be built to streamline a future Alternative 3. Andrew asked for any dissent on this recommendation to phasing. There was no dissent and it was agreed that Alternative 2 would be dismissed.
 - David Amiton agreed with Andrew’s summary, especially if an east side roundabout could be designed/sized to be forward-compatible with the flyover.
 - Ben, Andrea, Peter Russel, Dave Warrick all agreed.

NEXT STEPS / MILESTONES

- John noted this recommendation will move forward to the MPO Policy Board. John noted meeting notes from today would be provided.